V. CLAIMS

1. 1. An image processing method for use on a data processing device, the method comprising

2. • receiving at least one monocular video input image;

3. • segmenting at least one foreground object from the input image;

4. • applying at least one respective transformation to each segmented object and to the

5. background, for each of a plurality of output images;

6. • deriving the plurality of output images from the results of the respective transformations.

1. 2. The method of claim 1, further comprising second segmenting at least one background object

2. from the input image and applying a respective transformation to each segmented background

3. object for each of the plurality of output images.

1. 3. The method of claim 1, wherein there are two output images and two respective

2. transformations are applied to each segmented object and two transformations are applied to

3. the background to create the two output images.

1. 4. The method of claim 1, further comprising displaying the plurality of output images in a

2. combining device, so that the plurality of output images are perceivable by a user as a single

3. image having enhanced three dimensional appearance.

1. 5. The method of claim 1, wherein the respective transformations applied to the foreground

2   object make the foreground object stand out from the background.

1   6.   The method of claim 5, wherein

2   •   the receiving comprises receiving a multiplicity of monocular input images;

3   •   the deriving comprises deriving a respective plurality of output images for each of the

4   monocular input images;

5   •   the method further comprises displaying the respective pluralities of output images in a

6   combining device, so that the respective pluralities of output images are perceivable by a user

7   as a sequence of single images giving an illusion of motion and having an enhanced three

8   dimensional appearance in which the at least one foreground object moves separately from

9   the at least one background object.

1   7.   The method of claim 6, wherein the at least one foreground object appears to move in the

2   output images, while at least a portion of the rest of the image appears not to move.

1   8.   The method of claim 1, wherein the segmenting and applying involve using domain

2   knowledge to recognize positions of expected objects in the monocular input image and

3   derive positions of objects in the output images.

1   9.   The method of claim 1, wherein the respective transformations for background pixels are

2   derived by comparing at least two monocular input images of a single scene.

1   10. The method of claim 1, further comprising, prior to applying the transformation,

2   approximating a position of each segmented object as appearing on a fronto-parallel plane.